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SN: 10/027,146

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Complete Listing of Claims:

1. (Currently amended) A method of fabricating a plurality of micro probes comprising the steps of:

providing one or more masks, each of said one or more masks including a plurality of probe shapes, each of said plurality of probe shapes including a probe base, a probe shaft connected to said probe base, a probe end connected to said probe shaft, and one or more raised surfaces on at least one of said probe base, said probe end, and said probe shaft;

applying a photoresist to first and second opposing sides of a metal foil;
overlaying one each of said masks on opposing first and second sides of said metal foil;

exposing said photoresist to light passed through each of said masks;

developing said photoresist;

removing a portion of said photoresist to expose a portion of said metal foil; and

applying an etcher to the surface of said metal foil to remove said exposed portion to produce a plurality of probes, each of said plurality of probes including a probe base, a probe shaft connected to said probe base, a probe end connected to said probe shaft, and one or more raised surfaces on at least one of said probe base, said probe end, and said probe shaft.

2. (Original) The method of claim 1 comprising the additional step of chemically polishing and plating the plurality of probes after the application of the etcher to the surface of said metal foil.

Claim 3 (Canceled)

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4. (Currently amended) A micro probe ~~manufactured according to the method of claim 1~~
~~said micro probe~~ comprising:

a probe base having a generally uniform thickness bounded by a plurality of edges
and extending for a substantially straight length in a plane;

a probe shaft connected to said probe base said probe shaft of said generally
uniform thickness, bounded by a plurality of edges, and extending along a curved
expanse within said plane;

a probe end connected to said probe shaft said probe end of said generally
uniform thickness, bounded by a plurality of edges, and extending for a substantially
straight distance within said plane said straight distance being approximately parallel to
said straight length;

one or more raised surfaces positioned on at least one of said probe base, said
probe shaft, and said probe end, wherein said one or more raised surfaces are not formed
from a mechanical process; and

a scallop running substantially around a periphery comprised of the edges of said
probe base, said probe shaft, and said probe end.

5. (Original) The micro probe of claim 4 wherein said uniform thickness is preferably
between 2 mils and 5 mils.

6. (Original) The micro probe of claim 5 wherein said uniform thickness is most preferably
between 3 mils and 4 mils.

7. (Original) The micro probe of claim 6 wherein said scallop further comprises a scallop
base and a scallop tip.

8. (Original) The micro probe of claim 7 wherein said scallop base and said scallop tip are
separated by a substantially uniform distance.

9. (Currently amended) A probe test head comprising:

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a first die comprised of first and second opposing planar surfaces said first die further comprising a pattern of first die holes extending through said first die in a direction perpendicular to both of said first and second planar surfaces;

a second die comprised of third and forth opposing planar surfaces said second die further comprising a pattern of second die holes corresponding to said pattern of first die holes said second die holes extending through said second die in said direction wherein said third planar surface is arranged in planar contact with said second planar surface such that said second die holes are offset from said first die holes in a substantially uniform direction; and

a plurality of probes one each of said probes extending through one of said first die holes and one of said second die holes, wherein each of said plurality of probes are manufactured according to the method of claim 1 includes means for removably retaining said plurality of probes within said first and second die and said means for removably retaining said plurality of probes are not formed from a mechanical process.

Claim 10 (Cancelled)

11. (Original) The probe test head of claim 9 wherein each of said plurality of probes is substantially uniform in shape when compared to each other one of said plurality of probes.
12. (Original) The probe test head of claim 9 wherein the length of each of said plurality of probes is preferably within .002 inches of every other one of said plurality of probes.
13. (Original) The probe test head of claim 12 wherein the length of each of said plurality of probes is preferably within .001 inches of every other one of said plurality of probes.
14. (Original) The probe test head of claim 13 wherein the length of each of said plurality of probes is preferably within .0005 inches of every other one of said plurality of probes.

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15. (New) The probe test head of claim 9, wherein said means for removably retaining said plurality of probes within said first and second die includes one or more raised surfaces positioned on each of said plurality of probes.